CCC - P68808 Page 1 of 1

## PURAFIL ENVIRONMENTAL CORROSIVITY REPORT

22-Dec-2010

**Company:** 116804

Room/Area ID: Reference #:



 Sales Order #:
 C002726

 CCC Panel #:
 P68808

 Date In:
 16-Nov-2010

 Date Out:
 30-Nov-2010

Days In Service: 14

**CCC Panel # P68808** 

ISA Class G2 Moderate

Copper Corrosion 529 Å/30 Days

Silver Corrosion 2125 Å/30 Days

(see next page for complete analysis)

## Summary for PURAFIL CCC # P68808

The electrolytic reduction analysis on Corrosion Classification Coupon #P68808 shows the presence of moderate concentrations of contaminants in the environment tested. The hydrogen sulfide level is expected to range between 3 and 10 ppb and the sulfur dioxide level between 10 and 100 ppb. The effects of corrosion are measurable and may be a factor in determining equipment reliability.

Your local representative for additional information and assistance is:

Environmental Health and Eng

117 Fourth Avenue, Needham MA 02494, USA

tminegishi@eheinc.com

Purafil, Inc. / 2654 Weaver Way, Doraville GA 30340 USA / (770) 662-8545 / (770) 263-6922 Email: purafil@purafil.com / Internet: http://www.purafil.com

Displaying Page 1 Display Page 2

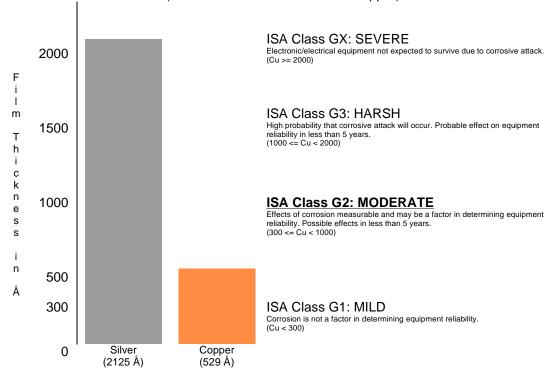
CCC - P68808 Page 1 of 1

## PURAFIL CCC # P68808 Analysis Results

| Corrosion Film Composition Projections |         |                 |               | Gold Coupon -<br>Magnified 20x |
|--|---------|-----------------|---------------|--------------------------------|
|  | 30 Days | , <u>1 Year</u> | <u>5 Year</u> |                                |
| Copper Films                           |         |                 |               |                                |
| Cu <sub>2</sub> S                      | 400 Å   | 811 Å           | 1388 Å        |                                |
| Cu <sub>2</sub> O                      | 129 Å   | 262 Å           | 448 Å         |                                |
| Unknowns                               | 0 Å     | 0 Å             | 0 Å           |                                |
| Totals                                 | 529 Å   | 1073 Å          | 1836 Å        |                                |
| Silver Films                           |         |                 |               |                                |
| AgCl                                   | 0 Å     | 0 Å             | 0 Å           |                                |
| Ag <sub>2</sub> S                      | 2125 Å  | 25867 Å         | 129333 Å      |                                |
| Unknowns                               | 0 Å     | 0 Å             | 0 Å           |                                |
| Totals                                 | 2125 Å  | 25867 Å         | 129333 Å      |                                |
| Gold Pore Corrosion:                   |         |                 |               |                                |
| Note: 1000 Å = 0.1 micron              |         |                 |               |                                |

## **Equipment Reliability Correlation**

(ISA Standard S71.04-1985 for Copper)



Displaying Page 2 <u>Display Page 1</u>